L Number	Hits	Search Text	DB	Time stamp
1	697	544/71, 544/101, 514/230.2	USPAT	2004/10/27 13:58
2	80834	microbial or microb\$	USPAT	2004/10/27 13:58
3	70	(544/71, 544/101, 514/230.2) and	USPAT	2004/10/27 13:58
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Day: Wednesday

Date: 10/27/2004

Time: 13:59:14

PALM INTRANET

Inventor Information for 10/677551

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SHERRY, DEBRA ANN	CHELSEA	MICHIGAN
DOBROWOLSKI, PAUL JOSEPH	SALINE	MICHIGAN

Appln Info Contents Petition Info Atty/Agent I	nfo // Continuity Data	Foreign Data
Search Another: Application#	or Patent#	Search
PCT / Search	or PG PUBS #	And the state of t
Attorney Docket #	Search	
Bar Code #	arch	

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FULL ESTIMATED COST

ENTRY SESSION 0.21 0.21

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STRUCTURE FILE UPDATES: 26 OCT 2004 HIGHEST RN 769912-90-5 DICTIONARY FILE UPDATES: 26 OCT 2004 HIGHEST RN 769912-90-5

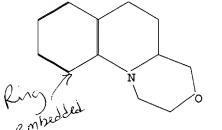
TSCA INFORMATION NOW CURRENT THROUGH MAY 21, 2004

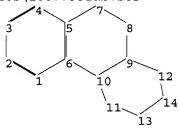
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=> Uploading C:\Program Files\Stnexp\Queries\10677551ab.str





ring nodes :

1 2 3 4 5 6 7 8 9 10 11 12 13 14

ring bonds :

1-2 1-6 2-3 3-4 4-5 5-6 5-7 6-10 7-8 8-9 9-10 9-12 10-11 11-13 12-14 13-14

exact/norm bonds :

5-7 6-10 7-8 8-9 9-10 9-12 10-11 11-13 12-14 13-14

normalized bonds :

1-2 1-6 2-3 3-4 4-5 5-6

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 11:Atom 12:Atom 13:Atom 14:Atom

L1 STRUCTURE UPLOADED

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SAMPLE SEARCH INITIATED 11:52:32 FILE 'REGISTRY'

Habte

10/27/2004

10/677,551 Page 3

SAMPLE SCREEN SEARCH COMPLETED -882 TO ITERATE

882 ITERATIONS 7 ANSWERS 100.0% PROCESSED

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**

BATCH **COMPLETE**

PROJECTED ITERATIONS: 15859 TO 19421

7 TO PROJECTED ANSWERS: 298

7 SEA SSS SAM L1

=> s l1 sss full FULL SEARCH INITIATED 11:52:50 FILE 'REGISTRY' FULL SCREEN SEARCH COMPLETED - 16937 TO ITERATE

100.0% PROCESSED 16937 ITERATIONS 158 ANSWERS

SEARCH TIME: 00.00.01

L3 158 SEA SSS FUL L1

=> file caplus

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SESSION ENTRY FULL ESTIMATED COST 155.42 155.63

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11 L3 L4

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L4 ANSWER 1 OF 11 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2004:778888 CAPLUS
DOCUMENT NUMBER: 141:278615
TITLE: Photochromic chromenes showing rapid decoloration,

INVENTOR(S): PATENT ASSIGNEE(S): SOURCE:

optical materials containing them Tokuyama Corp., Japan
Jpn. Kokai Tokkyo Koho, 26 pp.
CODEN: JKXXAF
Patent

DOCUMENT TYPE: Japanese

LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004262837	A2	20040924	JP 2003-54827	2003022
PRIORITY APPLN. INFO.:			JP 2003-54827	2003022

GΙ

and

Photochromic optical materials (e.g., lenses) contain chromenes I [W = (un)substituted (cyclo)alkylene, (un)substituted arylene; R1 = H, alkyl, aralkyl; R1 may form ring with W: R2, R3 = OH, alkyl, alkoxy, aralkyl, aralkyx, amino, cyano, NO2, etc.; R4, R5 = alkyl, (un)substituted aryl, aromatic heterocyclyl; R4R5 may form ring; m, n = 0-4]. Thus, archylene

polymer material showing Amax 592 nm, coloration d. [ϵ (120) - ϵ (0)] 0.88, decoloration rate (t1/2) 22 s, and inital yellowness index 4.

IT 758691-63-3P

RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PRP (Properties); TEM (Technical or engineered material use); PREP

work

L4 ANSWER 2 OF 11 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2004:308443 CAPLUS
DOCUMENT NUMBER: 140:339202
TITLE: Preparation of tricyclic tetrahydroquinoline antibacterial agents
INVENTOR(S): Barbachyn, Michel Robert; Dobrowolski, Paul Joseph;
Hurd, Alexander Ross; McNamara, Dennis Joseph;

Palmer,

John Raymond; Romero, Arthur Glenn; Ruble, James Craig; Sherry, Debra Ann; Thomasco, Lisa Marie; Toogood, Peter Laurence
Pharmacia & Upjohn Company, USA
PCT Int. Appl., 128 pp.
CODEN: PIXXD2
Patent

PATENT ASSIGNEE(S): SOURCE:

DOCUMENT TYPE:

Patent English 1 FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO.																	
Wo 2004031195					20040415				003-								
							AU,										
		co,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,	GE,
		GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	ΚP,	KR.	ΚZ,	LC,	LK,
		LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NI,	NO,	NZ,
		OM,	PG,	PH,	PL,	PT,	RO,	RU,	sc,	SD,	SE,	SG,	sĸ,	SL,	SY,	ТJ,	TM,
		TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	2₩,	AM,	AZ,
		BY,	KG,	KZ,	MD												
	RW:	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	82,	TZ,	UG,	ZM,	ZW,	ΑT,	BE,	BG,
		CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	ΗU,	IE,	IT,	LU,	MC,
		NL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,
							TD,										
US	2004	1622	79		A1		2004	0819	1	US 2	003-	6775	51		2	0031	
PRIORITY	APP	LN.	INFO	.:						US 2	002-	4166	85P		P 2	0021	007
									1	US 2	002-	4271	89P		P 2	0021	118
										US 2	003-	4576	22P		P 2	0030	326

MARPAT 140:339202 OTHER SOURCE(S):

$$(\mathbb{R}^4)_{1?3} \xrightarrow{\mathbb{R}^3}_{\mathbb{R}^5} \mathbb{R}^1$$

$$\mathbb{R}^5$$

AB The invention includes tricyclic tetrahydroquinolines (shown as I;

Habte

ANSWER 1 OF 11 CAPLUS COPYRIGHT 2004 ACS on STN (Preparation); USES (Uses) (manuf. of photochromic chromenes for lenses) 758691-63-3 CAPLUS INDEX NAME NOT YET ASSIGNED

(Continued)

ΙT

758691-72-4
RL: RCT (Reactant); RACT (Reactant or reagent)
(manufacture of photochromic chromenes for lenses)
758691-72-4 CAPILUS
INDEX NAME NOT YET ASSIGNED

ANSWER 2 OF 11 CAPLUS COPYRIGHT 2004 ACS on STN (Continued) variables defined below; many of the examples are spiro compds., e.g.

wariables defined below; many of the examples are spiro compds., e.g. and trans-II), and pharmaceutical compns. thereof, that exhibit useful antibacterial activity against a wide range of human and veterinary pathogens. For I: Rl is R12, C(O)R6, or CN: R2 = R12, C(O)R7, CN, CK2R7, NR17R7, CH2COR7, CH2CH2COR7, R3 = H, R2, O, C1-7 alkyl, C3-8 eycloalkyl, aryl, heteroaryl, or halo: each R4 = H, halo, CR12, OC(O)NR9R10, SR12, S(O)mR13, NR9R10, NR9S(O)mR13, NR9C(O)OR13, Ph, heteroaryl, eyano, nitro, CONR9R10, CC2R12, C(O)R13, C(:NOR12)R13, S(O)mNPSR10, NR9C(O)R12, C1-7 alkyl, C3-8cycloalkyl, N3, hetl, or C(O)O-C1-4alkyl-R12; each R5 = H, C1-7alkyl, C3-8cycloalkyl, aryl or heteroaryl: X = -(C(R15)2)H-O-(C(R15)2)H-, -[C(R15)2]N-R16-(C(R15)2)H-, C1-7alkyl, C3-8cycloalkyl, aryl, or heteroaryl: Hetl is a C- or N-linked 5-8 membered mono- or bicyclic ring, each mono- or bicyclic ring being fully satol. or partially unsatd., and having 1-4 heteroatoms O, S, and N; hetl being (un)substituted by 1-2 substituents = C1-C4alkyl, amino, C1-C4alkylamino, C1-C4alkyloxy, gen.

halogen, CN, O, or S; addnl. details including provisos are given in the claims.

method of prepn. is claimed and .apprx.60 example prepns. are included. For example, cis- and trans-II were prepd. in 3 steps starting with condensation of 2-fluoro-5-nitrobenzaldehyde with 2,6-dimethylmorpholine to give cis- and trans-I2-(2,6-dimethylmorpholin-4-yl)-5-nitrobenzaldehyde, each of which was condensed with barbituric acid to give cis- and trans-5-[2-(2,6-dimethylmorpholin-4-yl)-5-nitrobenzylidene|pyrimidine-2,4,6(IH,3H,5H)-trione, resp., each of which was cyclized in refluxing MeOH. Inhibition of E. coli DNA gyrase by 12 examples of I are reported. IT 679939-05-5F
RL: PAC (Pharmacological activity); PEP (Physical, engineering or chemical

ical
process); PYP (Physical process); RCT (Reactant); SPN (Synthetic
preparation); THU (Therapeutic use); EJOL (Biological study); PREP
(Preparation); PROC (Process); RACT (Reactant or reagent); USES (Uses)
(drug candidate, chromatog, resolution; preparation of tricyclic
tetrahydroquinoline antibacterial agents)
679839-05-5 CAPLUS
Spiro([1,4]oxazino[4,3-a]quinoline-5(6H),5'(2'H)-pyrimidine]2',4',6'(1'H,3'H)-trione, 1,2,4,4a-tetrahydro-2,4-dimethyl-8-nitro-,
(2R,4S)-rel- (SCI) (CA INDEX NAME)

IT 679839-36-2P 679839-41-9P
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREF (Preparation); RACT (Reactant or reagent); USES (Uses) (drug candidate; preparation of tricyclic tetrahydroquinoline antibacterial agents)
RN 679839-36-2 CAPLUS
CN Carbamic acid, [{2R,45,4aS}-1,1',2,3',4,4',4a,6'-octahydro-2,4-dimethyl-

2',4',6'-trioxospiro[[1,4]oxazino[4,3-a]quinoline-5(6H),5'(2'H)-pyrimidin]-8-yl]-, 1,1-dimethylethyl ester, rel- (9CI) (CA INDEX NAME)

679839-41-9 CAPLUS Spiro[[1,4]oxazino[4,3-a]quinoline-5[6H],5'[2'H]-pyrimidine]-2',4',6'[4'H,3'H]-trione, 8-acetyl-1,2,4,4a-tetrahydro-2,4-dimethyl-, [2R,4S,4a5]-rel- [9CI] (CA INDEX NAME)

ANSWER 2 OF 11 CAPLUS COPYRIGHT 2004 ACS on STN (Continued) 679840-95-09 681006-33-79
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES

(Uses)
(drug candidate; prepn. of tricyclic tetrahydroquinoline antibacterial agents)
679839-06-6 CAPLUS
Spiro([1,4]0xazino[4,3-a]quinoline-5(6H),5'(2'H)-pyrimidine]2',4',6'(1'H,3'H)-trione, 1,2,4,4a-tetrahydro-2,4-dimethyl-8-nitro-,
(2R,4R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

679839-11-3 CAPLUS
Spiro[[1,4]oxazino[4,3-a]quinoline-5(6H),5'(2'H)-pyrimidine]2',4',6'[1'H,3'H)-trione, 1,2,4,4a-tetrahydro-2,4-dimethyl-,
(2R,4S,4aS)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

679839-13-5 CAPLUS
Spiro[[1,4]oxazino[4,3-a]quinoline-5(6H),5'(2'H)-pyrimidine]2',4',6'(1'H,3'H)-trione, 8-bromo-1,2,4,4a-tetrahydro-2,4-dimethyl-,
(2R,4S,4S3)-rel- (9CI) (CA INDEX NAME)

L4 ANSWER 2 OF 11 CAPLUS COPYRIGHT 2004 ACS on STN (Continued) Relative stereochemistry.

679839-06-6F 679839-11-3F 679839-13-5F 679839-16-8F 679839-13-19-1F 679839-12-6F 679839-13-19-1F 679839-12-6F 679839-13-17F 679839-36-0F 679839-34-0F 679839-31-7F 679839-33-73-9F 679839-34-0F 679839-35-17F 679839-33-73-9F 679839-34-6F 679839-55-0F 679839-55-2F 679839-55-5F 679839-55-5F 679839-55-5F 679839-55-5F 679839-55-7F 679839-55-5F 679839-55-5F 679839-55-7F 679839-57-9F 679839-57-9F 679839-57-9F 679839-57-9F 679839-57-9F 679839-57-9F 679839-57-9F 679839-57-9F 679839-57-9F 679840-57-9F 679840-55-0F 679840-65-0F 679840-55-0F 679840-55-0F 679840-65-0F 679840-55-0F 6798

ANSWER 2 OF 11 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

679839-16-8 CAPLUS
Spiro[[1,4]oxazino[4,3-a]quinoline-5[6H],5'[2'H]-pyrimidine]2',4',6'[4'H,3'H]-trione, 8-fluoro-1,2,4,4a-tetrahydro-2,4-dimethyl-,
(2R,4S,4aS)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

679839-19-1 CAPLUS
Spiro{[1,4]oxazino[4,3-a]quinoline-5(6H),5'(2'H)-pyrimidine}2',4',6'(1'H,3'H)-trione, 1,2,4,4a-tetrahydro-2,4-dimethyl-8(trifluozomethyl)-, (2R,45,4aS)-rel- (9CI) (CA INDEX NAME)

RN 679839-22-6 CAPLUS
Spiro[[1,4]oxazino[4,3-a]quinoline-5(6H),5'(2'H)-pyrimidine]-8carbonitrile,
1,1',2',3',4',4',4a,6'-octahydro-2,4-dimethyl-2',4',6'-trioxo, (24,48,4as)-rel- (SCI) (CA INDEX NAME)

Relative stereochemistry.

RN 679839-24-8 CAFLUS
Spiro[[1,4]oxazino[4,3-a]quinoline-5(6H),5'(2'H)-pyrimidine]-8carboxanide,
1,1',2,3',4,4',4a,6'-octahydro-2,4-dimethyl-2',4',6'-trioxo-,
(2R,483)-rel- [9CI] (CA INDEX NAME)

Relative stereochemistry.

ANSWER 2 OF 11 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

RN 679839-33-9 CAPLUS
CN Spiro[[1,4]oxazino[4,3-a]quinoline-5(6H),5'(2'H)-pyrimidine]4',6'(1'H,3'H)-dione,
8-bromo-1,2',4,4-atterhydro-2,4-dimethyl-2'-thioxo-,
{2R,4S,4aS}-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

679839-34-0 CAPLUS Spiro[[1,4]0xazino[4,3-a]quinoline-5(6H),5'(2'H)-pyrimidine]-2',4',6'(1'H,3'H)-trione, 8-bromo-1,2,4,4a-tetrahydro-1',2,3',4-tetramethyl-, (2R,4S,4aS)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

L4 ANSWER 2 OF 11 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

679839-26-0 CAPLUS Spiro([1,4]oxazino[4,3-a]quinoline-5(6H),5'(2'H)-pyrimidine]-2',4',6'(1'H,3'H)-trione, 1,2,4,4a-tetrahydro-8-nitro- (9CI) (CA INDEX NAME)

679839-27-1 CAPLUS Spiro[[1,4]oxazino[4,3-a]quinoline-5[6H],5'(2'H)-pyrimidine]-2',4',6'(1'H,3'H)-trione, 1,2,4,4a-tetrahydro- (SCI) (CA INDEX NAME)

679839-31-7 CAPLUS Spire[[1,4]oxazino[4,3-a]quinoline-5(6H),5'(2'H)-pyrimidine]-2',4',6'(1'H,3'H)-trione, 1,2,4,4a-tetrahydro-1,4a-dimethyl-8-nitro-(9CI)

L4 ANSWER 2 OF 11 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

679839-35-1 CAPLUS Acetamide, N-[(2R,4S,4aS)-1,1',2,3',4,4',4a,6'-octahydro-2,4-dimethyl-2',4',6'-trioxospiro([1,4]oxazino[4,3-a]quinoline-5(6H),5'(2'H)-pyrimidin]-8-yl]-, rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

679839-37-3 CAPLUS
Spirof([1,4]0xazino[4,3-a]quinoline-5(6H),5'(2'H)-pyrimidine]2',4',6'(1'H,3'H)-trione, 8-amino-1,2,4,4a-tetrahydro-2,4-dimethyl-,
monohydrochloride, {2R,4S,4aS}-rel- (9CI) (CA INDEX NAME)

• HCl

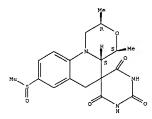
RN 679839-38-4 CAPLUS
CN Spiro[[1,4]oxazino[4,3-a]quinoline-5(6H),5'(2'H)-pyrimidine]2',4',6'(1'H,3'H)-trione,
9-hromo-1,2,4,4a-tetrahydro-2,4-dimethyl-8-nitro, (2R,4S,4aS)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 679839-44-2 CAPLUS
Spiro[[1,4]oxazino[4,3-a]quinoline-5(6H),5'(2'H)-pyrimidine]2',4',6'(1'H,3'H)-trione, 1,2,4,4a-tetrahydro-8-[1-(methoxyimino)ethyl]2,4-dimethyl-, (2R,4S,4aS)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry. Double bond geometry unknown.

L4 ANSWER 2 OF 11 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



RN 679839-50-0 CAPLUS
CN Spiro[[1,4]oxazino[4,3-a]quinoline-5(6H),5'(2'H)-pyrimidine]2',4',6'(1'H,3'H)-trione,
1,2,4,4a-tetrahydro-2,4-dimethyl-8-(methylthio), (2R,4S,4aS)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 679839-52-2 CAPLUS
Spiro[[1,4]oxazino[4,3-a]quinoline-5(6H),5'(2'H)-pyrimidine]2',4',6'(1'H,3'H)-trione, 1,2,4,4a-tetrahydro-2,4-dimethyl-9-nitro-,
[2R,4S,4aS]-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

L4 ANSWER 2 OF 11 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

RN 679839-45-3 CAPLUS
Spiro[[1,4]oxazino[4,3-a]quinoline-5(6H),5'(2'H)-pyrimidine]2',4',6'(1'H,3'H)-trione, 1,2,4,4a-tetrahydro-2,4-dimethyl-8(methylsulfonyl)-, (2R,4S,4as)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 679839-48-6 CAPLUS
CN Spiro[[1,4]oxazino[4,3-a]quinoline-5(6H),5'(2'H)-pyrimidine]2',4',6'(1'H,3'H)-trione, 1,2,4,4a-tetrahydro-2,4-dimethyl-8(methylsulfinyl)-, (2R,4S,4aS)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry

L4 ANSWER 2 OF 11 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

RN 679839-55-5 CAPLUS
Spiro[[1,4]oxazino[4,3-a]quinoline-5(6H),5'(2'H)-pyrimidine]2',4',6'('H,3'H)-trione, 1,2,4,4a-tetrahydro-1',2,3',4-tetramethyl-8nitro-, (2R,48,4as)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 679839-56-6 CAPLUS
CN Spiro[[1,4]oxazino[4,3-a]quinoline-5(6H),5'(2'H)-pyrimidine]2',4',6'(1'H,3'H)-trione, 1,2,4,4a-tetrahydro-1',2,4-trimethyl-8-nitro-,
(2R,4S,4aS)-rel- (9CI) (CA INDEX NAME)

679839-57-7 CAPLUS spiro[[1,4]oxarino[4,3-a]quinoline-5[6H],5'(2'H)-pyrimidine]-2',4',6'(1'H,3'H)-trione, 1,2,4,4a-tetrahydro-4-methyl-8-nitro-(9CI)

INDEX NAME)

679839-58-8 CAPLUS Spiro[[1,4]oxazino[4,3-a]quinoline-5(6H),5'(2'H)-pyrimidine]-2',4',6'(1'H,3'H)-trione, 1,2,4,4a-tetrahydro-2-methyl-8-nitro- (9CI)

INDEX NAME)

L4 ANSWER 2 OF 11 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

679839-68-0 CAPLUS
Spiro[[1,4]oxazino[4,3-a]quinoline-5(6H),5'(2'H)-pyrimidine]2',4',6'(1'H,3'H)-trione, 9-(4-chlorophenyl)-1,2,4,4a-tetrahydro-2,4dimethyl-, (2R,4S,4aS)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

679839-71-5 CAPLUS
Spiro[[1,4]oxazino[4,3-a]quinoline-5(6H),5'(2'H)-pyrimidine]2',4',6'(1'H,3'H)-trione, 1,2,4,4a-tetrahydro-2,4-dimethyl-9-[4(trifluoromethoxy)phenyl]-, (2R,4S,4aS)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

ANSWER 2 OF 11 CAPLUS COPYRIGHT 2004 ACS on STN (Continued) 679839-63-5 CAPLUS Spiro(2H-indene-2,5'(6'H)-[1,4]oxazino[4,3-a]quinoline]-8'-carbonitrile, 1,1',2',3,4',4'a-hexahydro-2',4'-dimethyl-1,3-dioxo-, (2'R,4'S,4'aR)-rel-(9CI) (CA INDEX NAME)

Relative stereochemistry.

679839-64-6 CAPLUS
[1,4]Oxazino[4,3-a]quinoline-5,5,8(6H)-tricarbonitrile,
1,2,4,4a-tetrahydro-2,4-dimethyl-, (2R,4s,4aR)-rel- (9CI) (CA INDEX

Relative stereochemistry.

679839-65-7 CAPLUS
[1,4]Oxazino[4,3-a]quinoline-5,5(6H)-dicarbonitrile, 8-bromo-1,2,4,4a-tetrahydro-2,4-dimethyl-, (2R,4S,4aR)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

L4 ANSWER 2 OF 11 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

679839-73-7 CAPLUS Spiro([1,4]0xazino[4,3-a]quinoline-5(6H),5'(2'H)-pyrimidine]-2',4',6'(1'H,3'H)-trione, 1,2,4,4a-tetrahydro-9-(4-methoxypheny1)-2,4-dimethyl-, (2R,45,4a5)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

679839-74-8 CAPLUS
Spiro[[1,4]oxazino[4,3-a]quinoline-5(6H),5'(2'H)-pyrimidine]2',4',6'[1'H,3'H)-trione,
-chloro-4-fluorophenyl)-1,2,4,4a-tetrahydro2,4-dimethyl-, (2R,4S,4aS)-rel- (9CI) (CA INDEX NAME)

679839-76-0 CAPLUS Spiro[[1,4]0xazino[4,3-a]quinoline-5(6H),5'(2'H)-pyrimidine]-2',4',6'(1'H,3'H)-trione, 1,2,4,4a-tetrahydro-2,4-dimethyl-9-(3-nitrophenyl)-, (2R,4S,4aS)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

679839-78-2 CAPLUS Benzonitrile, 4-[(2R,4S,4aS)-1,1',2,3',4,4',4a,6'-octahydro-2,4-dimethyl-

2',4',6'-trioxospiro[[1,4]oxazino[4,3-a]quinoline-5(6H),5'(2'H)-pyrimidin]-9-yl]-, rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

ANSWER 2 OF 11 CAPLUS COFYRIGHT 2004 ACS on STN (Continued)

679839-83-9 cRPLUS
Spiro[[1,4]oxazino[4,3-a]quinoline-5[6H],5'(2'H)-pyrimidine]-9-carboxylic
acid, 1,1',2,3',4,4',4a,6'-octahydro-2,4-dimethyl-2',4',6'-trioxo-,

ester, (2R,4S,4aS)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

679839-84-0 CAPLUS
Spiro[[1,4]oxazino[4,3-a]quinoline-5(6H),5'{2'H}-pyrimidine]-8-carboxylic
acid, 1,1',2,3',4,4',4a,6'-octahydro-2,4-dimethyl-2',4',6'-tricxo-, 679839~84-0 CAPLUS

methyl ester, (2R,4s,4as)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

L4 ANSWER 2 OF 11 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

679839-80-6 CAPLUS
Spiro[[1,4]oxazino[4,3-a]quinoline-5(6H),5'(2'H)-pyrimidine]2',4',6'(1'H,3'H)-trione, 1,2,4,4a-tetrahydro-2,4-dimethyl-9-[4(methylsulfonyl)phenyl]-, (2R,4S,4aS)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 679839-82-8 CAPLUS
CN Spiro[[1,4]oxazino[4,3-a]quinoline-5(6H),5'(2'H)-pyrimidine]2',4',6'(1'H,3'H)-trione,
1,2,4,4-tetrahydro-2,4-dimethyl-9-(4-pyridinyl), (2R,4S,4aS)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

L4 ANSWER 2 OF 11 CAPLUS COPYRIGHT 2004 ACS on STN

679839-87-3 CAPLUS
Spiro[[1,4]oxazino[4,3-a]quinoline-5(6H),5'(2'H)-pyrimidine]2',4',6'(1'H,3'H)-trione, 2,4-diethyl-1,2,4,4a-tetrahydro-8-nitro-,
{2R,4S,4aS}-rel- {9CI} (CA INDEX NAME)

Relative stereochemistry.

679839-92-0 CAPLUS
Spiro([1,4]oxazino(4,3-a]quinoline-5(6H),5'(2'H)-pyrimidine]2',4',6'(1'H,3'H)-trione, 1,2,4,4a-tetrahydro-4-methyl-8-nitro-2(trifluoromethyl)-, (2R,4R,4aR]-rel- (9CI) (CA INDEX NAME)

RN 679839-99-7 CAPLUS
Spiro[[1,4]0xazino[4,3-a]quinoline-5(6H),5'(2'H)-pyrimidine]2',4',6'('H,3'H)-trione, 1,2,4,4a-tetrahydro-4-methyl-8-nitro-2-propyl-,
(2R,4S,4aS)-rel- {9Cl} (CA INDEX NAME)

Relative stereochemistry.

RN 679840-05-2 CAPLUS

Spiro[[1,4]0xazino[4,3-a]quinoline-5(6H),5'(2'H)-pyrimidine]2',4',6'(1'H,3'H)-trione, 1,2,4,4a-tetrahydro-2,4-dimethyl-8-nitro-,
(25,4S,4aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L4 ANSWER 2 OF 11 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

RN 679840-19-8 CAPLUS
Spiro[[1,4]oxazino[4,3-a]quinoline-5(6H),5'(2'H)-pyrimidine]2',4',6'(1'H,3'H)-trione, 10-fluoro-1,2,4,4a-tetrahydro-2,4-dimethyl-8nitro-, (2R,4S,4aS)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 679840-23-4 CAPLUS
Spiro[[1,4]oxazino[4,3-a]quinoline-5(6H),5'(2'H)-pyrimidine]2',4',6'(1'H,3'H)-trione, 1,2,4,4-a-tetrahydro-2,4-dimethyl-8-(5-methyl-1,2,4-oxadlazol-3-yl)-, (2R,45,4aS)-rel- [9CI] (CA INDEX NAME)

Relative stereochemistry.

L4 ANSWER 2 OF 11 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

RN 679840-13-2 CAPLUS
CN Spiro[[1,4]oxazino[4,3-a]quinoline-5(6H),5'(2'H)-pyrimidine]2',4',6'(1'H,3'H)-trione, 8-acetyl-10-fluoro-1,2,4,4a-tetrahydro-2,4dimethyl-, (2R,4S,4aS)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry

RN 679840-15-4 CAPLUS
Spiro[[1,4]oxazino[4,3-a]quinoline-5(6H),5'(2'H)-pyrimidine]2',4',6'(1'H,3'H)-trione, 8-acetyl-9,10-difluoro-1,2,4,4a-tetrahydro-2,4dimethyl-, (2R,4S,4aS)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

L4 ANSWER 2 OF 11 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

RN 679840-25-6 CAPLUS
Spiro([1,4]oxazino[4,3-a]quinoline-5(6H),5'(2'H)-pyrimidine]2',4',6'('H,3'H)-trione, 1,2,4,4a-tetrahydro-2,4-dimethyl-8-(3-methyl-1,2,4-oxadiazol-5-yl)-, (2R,48,4as)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 679840-29-0 CAPLUS
Spiro{[1,4]oxazino[4,3-a]quinoline-5(6H),5'(2'H)-pyrimidine]-8carboxaldehyde, 1,1',2,3',4,4',4a,6'-octahydro-2,4-dimethyl-2',4',6'trioxo-, (2R,4S,4a5)-rel- (9CI) (CA INDEX NAME)

(Continued) L4 ANSWER 2 OF 11 CAPLUS COPYRIGHT 2004 ACS on STN

679840-31-4 CAPLUS spiro[[1,4]0xazino[4,3-a]quinoline-5(6H),5'(2'H)-pyrimidine]-2',4',6'(1'H,3'H)-trione, 1,2,4,4a-tetrahydro-2,4-dimethyl-8-nitro-,(2R,4S,4aS)-rel-(-)-[9CI] (CA INDEX NAME)

Rotation (-). Absolute stereochemistry unknown.

679840-32-5 CAPLUS
Spiro[[1,4]oxazino[4,3-a]quinoline-5(6H),5'(2'H)-pyrimidine]2',4',6'(1'H,3'H)-trione, 1,2,4,4a-tetrahydro-2,4-dimethyl- (9CI) (CA INDEX NAME)

ANSWER 2 OF 11 CAPLUS COPYRIGHT 2004 ACS on STN (Continued) 2',4',6'(1'H,3'H)-trione, 1,2,4,4a-tetrahydro-2,4-dimethyl-8-(trifluoromethyl)- (9CI) (CA INDEX NAME)

RN 679840-36-9 CAPLUS
CN Spiro[[1,4]cxazino[4,3-a]quinoline-5(6H),5'(2'H)-pyrimidine]-8-carbonitrile,
1,1',2,3',4,4',4a,6'-octahydro-2,4-dimethyl-2',4',6'-trioxo-(9CI) (CA INDEX NAME)

679840-37-0 CAPLUS Spiro[[1,4]0xazino[4,3-a]quinoline-5[6H),5'(2'H)-pyrimidine]-8-carboxamide, 1,1',2,3',4,4',4a,6'-octahydro-2,4-dimethyl-2',4',6'-trioxo-(SCI) (CA INDEX NAME)

679840-38-1 CAPLUS
Acetamide, N-(1,1',2,3',4,4',4a,6'-octahydro-2,4-dimethyl-2',4',6'-trioxospiro[[1,4]oxazino[4,3-a]quinoline-5[6N],5'(2'H)-pyrimidin]-8-yl}-

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L4 ANSWER 2 OF 11 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

679840-33-6 CAPLUS
Spiro[[1,4]oxazino[4,3-a]quinoline-5(6H),5'(2'H)-pyrimidine]2',4',6'(1'H,3'H)-trione, 8-bromo-1,2,4,4a-tetrahydro-2,4-dimethyl- (9CI)
(CA INDEX NAME)

679840-34-7 CAPIUS Spiro[[1,4]oxazino[4,3-a]quinoline-5(6H),5'(2'H)-pyrimidine]-2',4',6'(1'H,3'H)-trione, 8-fluoro-1,2,4,4a-tetrahydro-2,4-dimethyl-(9CI) (CA INDEX NAME)

679840-35-8 CAPLUS Spiro[[1,4]oxazino[4,3-a]quinoline-5(6H),5'(2'H)-pyrimidine]-

ANSWER 2 OF 11 CAPLUS COPYRIGHT 2004 ACS on STN (9CI) (CA INDEX NAME) (Continued)

679840-39-2 CAPLUS
Carbamic acid, (1,1',2,3',4,4',4a,6'-octahydro-2,4-dimethyl-2',4',6'trioxospiro([1,4]oxazino[4,3-a]quinoline-5(6H),5'(2'H)-pyrimidin]-8-yl)-,
1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

679840-40-5 CAPLUS
Spiro[[1,4]oxazino[4,3-a]quinoline-5(6H),5'[2'H]-pyrimidine]2',4',6'[1'H,3'H]-trione, 8-amino-1,2,4,4a-tetrahydro-2,4-dimethyl-,
monohydrochloride (9CI) (CA INDEX NAME)

679840-41-6 CAPLUS 10/27/2004 L4 ANSWER 2 OF 11 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)
CN Spiro[[1,4]oxazino[4,3-a]quinoline-5(6H),5'(2'H)-pyrimidine]2',4',6'(1'H,3'H)-trione,
9-bromo-1,2',4,4-at-terahydro-2,4-dimethyl-8-nitro(9CI) (CA INDEX NAME)

679840-42-7 CAPLUS
Spiro[[1,4]oxazino[4,3-a]quinoline-5(6H),5'(2'H)-pyrimidine]2',4',6'(1'H,3'H)-trione, 8-acetyl-1,2,4,4a-tetrahydro-2,4-dimethyl-

(CA INDEX NAME)

679840-43-8 CAPLUS
Spiro[[1,4]exazino[4,3-a]quinoline-5[6H],5'(2'H)-pyrimidine]2',4',6'(1'H,3'H)-trione, 1,2,4,4a-tetrahydro-8-[1-(methoxyimino)ethyl]2,4-dimethyl- (9CI) (CA INDEX NAME)

ANSWER 2 OF 11 CAPLUS COPYRIGHT 2004 ACS on STN (9CI) (CA INDEX NAME) (Continued)

6/984U-47-2 CAPLUS
Spiro[[1,4]oxazino[4,3-a]quinoline-5(6H),5'(2'H)-pyrimidine]2',4',6'(1'H,3'H)-trione, 1,2,4,4a-tetrahydro-2,4-dimethyl-9-nitro-(9CI)
(CA INDEX NAME)

679840-48-3 CAPLUS
Spiro[[1,4]oxazino[4,3-a]quinoline-5(6H),5'{2'H}-pyrimidine]2',4',6'(1'H,3'H)-trione, 1,2,4,4a-tetrahydro-1',2,3',4-tetramethyl-8nitro-(9CI) (CA INDEX NAME)

679840-49-4 CAPLUS Spiro[[1,4]oxazino[4,3-a]quinoline-5(6H),5'(2'H)-pyrimidine]-2',4',6'(1'H,3'H)-trione, 1,2,4,4a-tetrahydro-1',2,4-trimethyl-8-nitro-(9CI) (CA INDEX NAME)

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L4 ANSWER 2 OF 11 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

679840-44-9 CAPLUS Spiro[[1,4]0xazino[4,3-a]quinoline-5(6H),5'(2'H)-pyrimidine]-2',4',6'(1'H,3'H)-trione, 1,2,4,4a-tetrahydro-2,4-dimethyl-8-(methylsulfonyl)- (SCI) (CA INDEX NAME)

679840-45-0 CAPLUS
Spiro[[1,4]0xazino[4,3-a]quinoline-5(6H),5'(2'H)-pyrimidine]2',4',6'(1'H,3'H)-trione, 1,2,4,4a-tetrahydro-2,4-dimethyl-8(methylsulfinyl)- (9CI) (CA INDEX NAME)

RN 679840-46-1 CAPLUS
Spiro([1,4]oxazino[4,3-a]quinoline-5(6H),5'(2'H)-pyrimidine]2',4',6'(1'H,3'H)-trione,
1,2,4,4a-tetrahydro-2,4-dimethyl-8-(methylthio)-

L4 ANSWER 2 OF 11 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

679840-50-7 CAPLUS
Spiro[2H-indene-2,5'(6'H)-[1,4]oxazino[4,3-a]quinoline]-8'-carbonitrile,
1,1',2',3,4',4'a-hexahydro-2',4'-dimethyl-1,3-dioxo-(9CI) (CA INDEX NAME)

679840-51-8 CAPLUS
[1,4]Oxazino[4,3-a]quinoline-5,5,8(6H)-tricarbonitrile,
1,2,4,4a-tetrahydro-2,4-dimethyl- (9CI) (CA INDEX NAME)

679840-52-9 CAPLUS [1,4]Oxazlno(4,3-a)quinoline-5,5(6H)-dicarbonitrile, 8-bromo-1,2,4,4a-tetrahydro-2,4-dimethyl- (9CI) (CA INDEX NAME)

10/27/2004

(Continued) L4 ANSWER 2 OF 11 CAPLUS COPYRIGHT 2004 ACS on STN

679840-53-0 CAPLUS
Spiro[[1,4]exazino[4,3-a]quinoline-5(6H),5'(2'H)-pyrimidine]2',4',6'[4'H,3'H)-trione, 9-(4-chlorophenyl)-1,2,4,4a-tetrahydro-2,4dimethyl- (9CI) (CA INDEX NAME)

679840-54-1 CAPLUS
Spiro[[1,4]0xazino[4,3-a]quinoline-5(6H),5'(2'H)-pyrimidine]2',4',6'(1'H,3'H)-trione, 1,2,4,4a-tetrahydro-2,4-dimethyl-9-[4(trifluoromethoxy)phenyl]- (9CI) (CA INDEX NAME)

679840-55-2 CAPLUS
Spiro[[1,4]oxazino[4,3-a]quinoline-5(6H),5'(2'H)-pyrimidine]2',4',6'(1'H,3'H)-trione, 1,2,4,4a-tetrahydro-9-(4-methoxyphenyl)-2,4-dimethyl- (9CI) (CA INDEX NAME)

ANSWER 2 OF 11 CAPLUS COPYRIGHT 2004 ACS on STN (Continued) trioxospiro[[1,4]oxazino[4,3-a]quinoline-5(6H),5'(2'H)-pyrimidin]-9-y1)-(9CI) (CA INDEX NAME)

679840-59-6 CAPLUS
Spiro[[1,4]0xazino[4,3-a]quinoline-5(6H),5'(2'H)-pyrimidine]2',4',6'(1'H,3'H)-trione, 1,2',4',4a-tetrahydro-2',4-dimethyl-9-[4(methylsulfonyl)phenyl}- (9CI) (CA INDEX NAME)

RN 679840-60-9 CAPLUS
Spire[[1,4]0xszino[4,3-a]quinoline-5[6H),5'(2'H)-pyrimidine]2',4',6'(1'H,3'H)-trione,
1,2,4,4a-tetrahydro-2,4-dimethyl-9-(4-pyridinyl)(9C1) (CA INDEX NAME)

679840-61-0 CAPLUS
Spiro[[1,4]oxario[4,3-a]quinoline-5(6H),5'(2'H)-pyrimidine]-9-carboxylic
acid, 1,1',2,3',4,4',4a,6'-octahydro-2,4-dimethyl-2',4',6'-trioxo-, Habte

L4 ANSWER 2 OF 11 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

679840-56-3 CAPLUS
Spiro([1,4]oxazino[4,3-a]quinoline-5(6H),5'(2'H)-pyrimidine]2',4',6'(1'H,3'H)-trione,
-chloro-4-fluorophenyl)-1,2,4,4a-tetrahydro2,4-dimethyl- (9G1) (CA INDEX NAME)

679840-57-4 CAPLUS Spiro[[1,4]0xazino[4,3-a]quinoline-5(6H),5'(2'H)-pyrimidine]-2',4',6'(1'H,3'H)-trione, 1,2,4,4a-tetrahydro-2,4-dimethyl-9-(3-nitrophenyl)- (9CI) (CA INDEX NAME)

679840-58-5 CAPLUS
Benzonitrile, 4-(1,1',2,3',4,4',4a,6'-octahydro-2,4-dimethyl-2',4',6'-

ANSWER 2 OF 11 CAPLUS COPYRIGHT 2004 ACS on STN ester (9CI) (CA INDEX NAME) (Continued)

679840-62-1 CAPLUS Spiro[[1,4]0xazino[4,3-a]quinoline-5[6H],5'[2'H]-pyrimidine]-8-carboxylic acid, 1,1',2,3',4,4',4a,6'-octahydro-2,4-dimethyl-2',4',6'-trioxo-, methyl ester (9CI) (CA INDEX NAME)

RN 679840-63-2 CAPLUS
CN Spiro[[1,4]oxazino[4,3-a]quinoline-5(6H),5'(2'H)-pyrimidine]2',4',6'(1'H,3'H)-trione,
1,2,4,4a-tetrahydro-2-methyl-4-(1-methylethyl)-8nitro-, (2S,4R,4aR)- (9CI) (CA INDEX NAME)

RN 679840-64-3 CAPLUS
Spiro[[1,4]oxazino[4,3-a]quinoline-5(6H),5'{2'H}-pyrimidine]2',4',6'[1]H,3'H]-trione, 2,4-diethyl-1,2,4,4a-tetrahydro-8-nitro-,
(2R,4S,4aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 679840-65-4 CAPLUS
Spiro[[1,4]oxazino[4,3-a]quinoline-5[6H],5'[2'H]-pyrimidine]2',4',6'['H,3'H]-trione, 8-acetyl-9,10-difluoro-1,2,4,4a-tetrahydro-2,4dimethyl-, (2R,4S,4as)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L4 ANSWER 2 OF 11 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

RN 679840-68-7 CAPLUS
Spiro[[1,4]oxazino[4,3-a]quinoline-5(6H),5'(2'H)-pyrimidine]2',4',6'(1'H,3'H)-trione, 1,2,4,4a-tetrahydro-2,4-dimethyl-8-nitro-(GCI)
(GA INDEX NAME)

RN 679840-69-8 CAPLUS
CN Spiro[[1,4]oxazino[4,3-a]quinoline-5(6H),5'(2'H)-pyrimidine]2',4',6'(1'H,3'H)-trione,
1,2',4,a-tetrahydro-4-methyl-2-(1-methylethyl)-8nitro-, (2S,4R,4aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L4 ANSWER 2 OF 11 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

RN 679840-66-5 CAPLUS
Spiro([1,4]0x8zino(4,3-a]quinoline-5(6H),5'(2'H)-pyrimidine)2',4',6'(1'H,3'H)-trione, 10-fluoro-1,2,4,4a-tetrahydro-2,4-dimethyl-8nitro-, (2R,45,4aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 679840-67-6 CAPLUS
Spiro[[1,4]oxazino[4,3-a]quinoline-5(6H),5'(2'H)-pyrimidine]2',4',6'(1'H,3'H)-trione, 1,2,4,4a-tetrahydro-2,4-dimethyl-8-[5(trifluoromethyl)-1,2,4-oxadiazol-3-yl]-, (2R,4S,4aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L4 ANSWER 2 OF 11 CAPLUS COPYRIGHT 2004 ACS on STN (C

RN 679840-70-1 CAPLUS
Spiro([1,4]oxazino[4,3-a]quinoline-5(6H),5'(2'H)-pyrimidine)2',4',6'(1'H,3'H)-frione, 1,2,4,4a-tetrahydro-2,4-bis(1-methylethyl)-8ntto-, (2R,4S,4aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry

RN 679840-71-2 CAPLUS Spiro[[1,4]oxazino[4,3-a]quinoline-5[6H],5'[2'H]-pyrimidine]-2',4',6'[1'H,3'H]-trione, 1,2,4,4a-tetrahydro-2,4-dimethyl-8-[3-methyl-1,2,4-oxadiazol-5-yl]-, (2R,4S,4aS)- (9CI) (CA INDEX NAME)

RN 679840-72-3 CAPLUS
Spiro[[1,4]oxazino[4,3-a]quinoline-5(6H),5'(2'H)-pyrimidine]2',4',6'(1'H,3'H)-trione, 8-acetyl-10-fluoro-1,2,4,4a-tetrahydro-2,4dimethyl-, (2S,4R,4aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 679840-74-5 CAPLUS
CN Spiro[[1,4]oxazino[4,3-a]quinoline-5(6H),5'(2'H)-pyrimidine]2',4',6'(1'H,3'H)-trione, 8-bromo-1,2,4,4a-tetrahydro-2,4-dimethyl-10nitro- [9CI) (CA INDEX NAME)

L4 ANSWER 2 OF 11 CAPLUS COPYRIGHT 2004 ACS on STN

(Continued)

RN 679840-75-6 CAPLUS
Spiro[[1,4]oxazino[4,3-a]quinoline-5(6H),5'(2'H)-pyrimidine]2',4',6'(1'H,3'H)-trione, 1,2,4,4a-tetrahydro-2,4-dimethyl-8-(5-methyl1,2,4-oxadiazol-3-yl)-, (2R,4S,4aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 679840-76-7 CAPLUS
Spiro[[1,4]oxazino[4,3-a]quinoline-5(6H),5'(2'H)-pyrimidine]2',4',6'(1'H,3'H)-trione, 1,2,4,4a-tetrahydro-4-methyl-8-nitro-2(trifluoromethyl)-, (25,45,4as)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L4 ANSWER 2 OF 11 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

RN 679840-77-8 CAPLUS
Spiro[[1,4]oxazino[4,3-a]quinoline-5[6H],5'(2'H)-pyrimidine]-8-carboxylic
acid, 1,1',2,3',4,4',4a,6'-octahydro-2,4-dimethyl-2',4',6'-trioxo-,
(4-azido-3-iodophenyl)methyl ester, (2R,4S,4aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 679840-78-9 CAPLUS
Spiro[[1,4]oxazino[4,3-a]quinoline-5(6H),5'[2'H)-pyrimidine]2',4',6'(1'H,3'H)-trione, 1,2,4,4a-tetrahydro-4-methyl-8-nitro-,
(4R,4aR)-rel-(-)- (9CI) (CA INDEX NAME)

Rotation (-). Absolute stereochemistry unknown.

L4 ANSWER 2 OF 11 CAPLUS COPYRIGHT 2004 ACS on STN

(Continued)

RN 679840-79-0 CAPLUS
CN Spiro[{1,4}oxazino[4,3-a]quinoline-5(6H),5'(2'H)-pyrimidine]4',6'(1'H,3'H)-dione,
8-bromo-1,2,4,4a-tetrahydro-2,4-dimethyl-2'-thioxo-,
(2R,4S,4aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 679840-80-3 CAPLUS Spiro[[1,4]oxazino[4,3-a]quinoline-5(6H),5'(2'H)-pyrimidine]-2',4',6'(1'H,3'H)-trione, 8-bromo-1,2,4,4a-tetrahydro-1',2,3',4-tetramethyl-,(2R,4S,4aS)-(9CI) (CA INDEX NAME)

RN 679840-81-4 CAPLUS
Spiro(2H-indene-2,5'(6'H)-(1,4)oxazino[4,3-a]quinoline]-8'-carbonitrile,
1,1',2',3,4',4'a-hexahydro-2',4'-dimethyl-1,3-dioxo-, (2'R,4'S,4'aS)(9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 679840-82-5 CAPLUS
CN [1,4]Oxazino[4,3-a]quinoline-5,5,8(6H)-tricarbonitrile,
1,2,4,4a-tetrahydro-2,4-dimethyl-, (2R,4S,4aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L4 ANSWER 2 OF 11 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

RN 679840-86-9 CAPLUS
Spiro[[1,4]0xazino[4,3-a]quinoline-5[6H),5'(2'H)-pyrimidine]2',4',6'(1'H,3'H)-trione, 1,2,4,4a-tetrahydro-2,4-dimethyl-9-[4-(trifluoromethoxy)phenyl]-, (2R,4S,4aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 679840-88-1 CAPLUS Spirg[[1,4]oxazino[4,3-a]quinoline-5[6H],5'[2'H]-pyrimidine]-2',4',6'[1'H]-Tione, 1,2,4,4a-tetrahydro-9-[4-methoxyphenyl]-2,4dimethyl-, (2R,4S,4aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L4 ANSWER 2 OF 11 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

RN 679840-83-6 CAPLUS
CN [1,4]Oxazino(4,3-a)quinoline-5,5[6H)-dicarbonitrile, 8-bromo-1,2,4,4a-tetrahydro-2,4-dimethyl-, (2R,4S,485)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 679840-85-8 CAPLUS
Spiro[[1,4]oxazino[4,3-a]quinoline-5(6H),5'(2'H)-pyrimidine]2',4',6'(1'H,3'H)-trione, 9-(4-chlorophenyl)-1,2,4,4a-tetrahydro-2,4dimethyl-, (2R,48,4as)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L4 ANSWER 2 OF 11 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

RN 679840-89-2 CAPLUS
CN Spiro[(1,4)oxazino[4,3-a]quinoline-5(6H),5'(2'H)-pyrimidine]2',4',6'(1'H,3'H)-trione,
9-(3-chloro-4-fluorophenyl)-1,2,4,4a-tetrahydro2,4-dimethyl-, (2R,4S,4aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 679840-90-5 CAPLUS
Spiro([1,4]oxazino[4,3-a]quinoline-5(6H),5'(2'H)-pyrimidine]2',4',6'(1'H,3'H)-trione, 1,2,4,4a-tetrahydro-2,4-dimethyl-9-(3nitrophenyl)-, (2R,45,4aS)- (9CI) (CA INDEX NAME)

(Continued)

L4 ANSWER 2 OF 11 CAPLUS COPYRIGHT 2004 ACS on STN

679840-91-6 CAPLUS Benzonitrile, 4-[(2R, 4s, 4as)-1,1',2,3',4,4',4a,6'-octahydro-2,4-dimethyl-

2',4',6'-trioxospiro[[1,4]oxazino[4,3-a]quinoline-5(6H),5'(2'H)-pyrimidin]-9-yl]- (SCI) (CA INDEX NAME)

Absolute stereochemistry.

679840-92-7 CAPLUS
Spiro[[1,4]oxazino[4,3-a]quinoline-5(6H),5'(2'H)-pyrimidine]2',4',6'(1'H,3'H)-trione, 1,2,4,4a-tetrahydro-2,4-dimethyl-9-[4-(methylsuitonyl)phenyl]-, (2R,4S,4aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L4 ANSWER 2 OF 11 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

679840-95-0 CAPLUS
Benzolc acid, 3-[(2R,4S,4aS)-1,1',2,3',4,4',4a,6'-octahydro-2,4-dimethyl-

2',4',6'-trioxospiro[[1,4]oxazino[4,3-a]quinoline-5(6H),5'(2'H)-pyrimidin)-9-yl]-, methyl ester {9CI) (CA INDEX NAME)

Absolute stereochemistry.

681006-33-7 CAPLUS Spiro[[1,4]0xazino[4,3-a]quinoline-5(6H),5'(2'H)-pyrimidine]-2',4',6'(1'H,3'H)-trione, 1,2,4,4a-tetrahydro-2,4-dimethyl-8-nitro-, (2R,4S,4aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L4 ANSWER 2 OF 11 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

RN 679840-93-8 CAPLUS CN Spiro[[1,4]oxazino[4,3-a]quinoline-5(6H),5'(2'H)-pyrimidine}-2',4',6'(1'H,3'H)-trione, 1,2,4,4a-tetrahydro-2,4-dimethyl-9-(4-pyridinyl)-,(2R,4S,4aS)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

679840-94-9 CAPLUS Benzoic acid, 4-[{2R,4S,4aS}-1,1',2,3',4,4',4a,6'-octahydro-2,4-dimethyl-

2',4',6'-trioxospiro[[1,4]oxazino[4,3-a]quinoline-5(6H),5'(2'H)-pyrimidin]-9-yl]-, methyl ester (9GI) (CA INDEX NAME)

Absolute stereochemistry.

L4 ANSWER 2 OF 11 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

REFERENCE COUNT:

THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

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L4 ANSWER 3 OF 11 CAPLUS COPYRIGHT 2004 ACS ON STN ACCESSION NUMBER: 2004:43955 CAPLUS DOCUMENT NUMBER: 140:286955 Thermochemical study on the ri
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140:286965
Thermochemical study on the ring closure reaction of 5-morpholino-4-vinylpyridazinones by tert-amino

effect AUTHOR(S): Beke, Karolyhazy, Laszlo; Regdon, Geza; Elias, Oliver; Gyula; Tabi, Tamas; Hodi, Klara; Eros, Istvan;

Matyus, Peter

CORPORATE SOURCE:

Peter
Department of Organic Chemistry, Semmelweis
University, Budapest, 1092, Hung.
THEOCHEM (2003), 666-667, 667-680
CODEN: THEODJ; ISSN: 0166-1280
Elsevier Science B.V. SOURCE: PUBLISHER

DOCUMENT TYPE: LANGUAGE:

MENT TYPE: Journal
UAGE: English
Cyclization of tert-anillnes with a properly substituted vinyl moiety by
the tert-amino effect affords fused pyridines. This type of ring closure
reaction of 5-morpholino-4-vinylpyridazin

methods. The enthalpy values and heats of reactions were obtained from the thermograms by integrating the peak area corresponding to the ring-closure reaction, and by semiempirical (FM3) and DFT (d. function theory) calcns., resp. 675597-19-09
Ri: RPR (Properties); SPN (Synthetic preparation); PREP (Preparation) (melting temperature; DSC and FM3 and DFT study on the thermochem. of

closure reaction of 5-morpholino-4-vinylpyridazinones induced by tert-amino effect)
675597-19-0 CAPLUS
Spire[[1,4]0xazino[4,3-a]quinoline-5(6H),5'(2'H)-pyrimidine]2',4',6'(1'H,3'H)-trione, 1,2,4,4a-tetrahydro-1',3'-dimethyl- (9CI) (CA INDEX NAME)

REFERENCE COUNT:

10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR

RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

ACCESSION NUMBER: DOCUMENT NUMBER:

TITLE:

ANSWER 4 OF 11 CAPLUS COPYRIGHT 2004 ACS ON STN

SSION NUMBER: 1999:468342 CAPLUS

MENT NUMBER: 131:102292

E: 131:102292

Preparation of 6-heterocycly1-9,10-dihydro-9-acridinone derivatives and their nitrogen-containing tri- and tetracyclic analogs as antiviral agents

NTOR(S): Furtla, Yosuke; Sugita, Atsushi; Uehara, Sayuri; Takahashi, Kazumi; Nagaki, Hideyoshi; Kamina, INVENTOR (S):

Hiroshi;

Shiraki, Kimiyasu Toyama Chemical Co., Ltd., Japan Jpn. Kokai Tokkyo Koho, 74 pp. CODEN: JKXXAF PATENT ASSIGNEE(S):

SOURCE:

DOCUMENT TYPE: Patent Japanese

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

DATE KIND DATE APPLICATION NO. PATENT NO. 19981016 19990727 JP 11199565 A2 PRIORITY APPLN. INFO.:

OTHER SOURCE(S): MARPAT 131:102292

The title compds. [I; R1 = {un}substituted alkyl, alkenyl, cycloalkyl, aryl, or heterocyclyl; R2 = {un}substituted aryl or heterocyclyl; R3 = H, halo, {un}protected OH, NH2, or CO2H, {un}substituted alkyl; R4 = H,

halo, (un)protected OH, NHZ, OF COZH, (un)substituted stays, NHZ - N, halo;

Al, A2 = N, CH; A3 = CH or A3 and R1 together form optionally alky1-substituted CH2CH2-B; B = 0, NH] are prepared They are useful as antiviral agents, in particular anti-herpes simplex virus (anti-HSV) agents. Thus, (10-bromo-5-fluoro-7-cxo-1,2-dihydro-7H-[1,4]oxazino[2,3,4-de]acridin-2-yl)methyl accetate was coupled with 2-(1,1,1-trimethylstannyl)
1,3-thiazole in the presence of bis(triphenylphosphine)palladium dichloride in xylene under reflux, followed by saponification to give 5-fluoro-2-(hydroxymethyl)-10-[1,3-thiazol-2-yl)-1,2-dihydro-7H-[1,4]oxazino[2,3,4-de]acridin-7-one [II]. II in vitro inhibited HSV-2 with ICSO of 0.08 µg/mL. Pharmaceutical formulations containing I were also prepared

also prepared 231625-09-4P 231625-10-9P 231625-11-9P RI: BAC (Biological activity or effector, except adverse); BSU

ogical study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation of heterocyclyldihydroacridinone derivs. and their BIOL

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L4 ANSWER 4 OF 11 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)
nitrogen-contg. tri- and tetracyclic analogs as antiviral agents)
RN 231625-08-4 CAPLUS
CN 7H-[1,4]Oxazino[2,3,4-de]acridin-7-one,
5-fluoro-1,2-dihydro-10-(1H-1,2,4triazol-1-y1)- (9CI) (CA INDEX NAME)

RN 231625-10-8 CAPLUS CN 7H-[1,4]Oxazinc[2,3,4-de]acridin-7-one, 2-[(acetyloxy)methyl]-5-fluoro-1,2-dihydro-10-[2-thiazolyl)- (9cI) (CA INDEX NAME)

231625-11-9 CAPLUS 7H-[1,4]Oxazino[2,3,4-de]acridin-7-one, 5-fluoro-1,2-dihydro-2-(hydroxymethyl)-10-(2-thiazolyl)- (9CI) (CA INDEX NAME)

231626-13-4
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of heterocyclyldihydroacridinone derivs. and their
nitrogen-containing tri- and tetracyclic analogs as antiviral agents)
231626-13-4
CAPUS
7H-[1,4]0xazino[2,3,4-de]acridin-7-one, 2-[(acetyloxy)methyl]-1-bromo-5fluoro-1,2-dihydro- (9CI) (CA INDEX NAME)

10/27/2004

231625-90-4F 231625-98-2F 231625-99-3F
RL: RCT (Reactant); SPN (Synthetic preparation); FREF (Preparation); RACT (Reactant or reagent)
(preparation of heterocyclyldihydroacridinone derivs. and their nitrogen-containing tri- and tetracyclic analogs as antiviral agents)
231625-90-4 CAPLUS
7H-[1,4]0xazino[2,3,4-de]acridin-7-one, 5,10-difluoro-1,2-dihydro- (SCI)
(CA INDEX NAME)

231625-98-2 CAPLUS 7H-[1,4]Oxazino[2,3,4-de]acridin-7-one, 10-bromo-5-fluoro-1,2-dihydro-(9CI) (CA INDEX NAME)

сн2-он

231625-99-3 CAPLUS 7H-[1,4]Oxazin [2,3,4-de]acridin-7-one, 2-[(acetyloxy)methyl]-10-bromo-5-flooro-1,2-dihydro- [9CI) (CA INDEX NAME)

ANSWER 5 OF 11 CAPLUS COPYRIGHT 2004 ACS ON STN
SSION NUMBER: 1995:711926 CAPLUS
MENT NUMBER: 123:285825
E: Synthesis of tricyclic cyano-substituted
tetrahydroquinolines by radical decyanation of

ACCESSION NUMBER:

DOCUMENT NUMBER: TITLE:

dinitriles
Gerlach, Uwe
Hoechist AG, Frankfurt, 65296, Germany
Tetrahedron Letters (1995), 36(29), 5159-62
CODEN: TELEAY; ISSN: 0040-4039
Elsevier
Journal
English
CASRFACT 123:285825 geminal

AUTHOR (S):

CORPORATE SOURCE: SOURCE:

PUBLISHER:

DOCUMENT TYPE: LANGUAGE:

OTHER SOURCE(S):

Various dicyanides I (X = bond, CH2, NMe, O, S, SO, SO2) of tricyclic tetrahydroquinoline derivs. were converted to their monocyanides in high yield by reductive radical decyanation with tributyltin hydride and 2,2'-azobisisobutyronitrile (AIBN). 87659-07-8

169778-23-0P 169778-24-9P
RL: SPN (Synthetic preparation); PREP (Preparation)
 (synthesis of tricyclic cyano-substituted tetrahydroquinolines by radical decyanation of geminal dinitriles)
169778-23-8 CAPLUS
[1,4]Oxazino[4,3-a]quinoline-5-carbonitrile, 1,2,4,4a,5,6-hexahydro-,trans- (9CI) (CA INDEX NAME)

Relative stereochemistry.

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L4 ANSWER 4 OF 11 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

ANSWER 5 OF 11 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

169778-24-9 CAPLUS [1,4]Oxazino[4,3-a]quinoline-5-carbonitrile, 1,2,4,4a,5,6-hexahydro-, (9CI) (CA INDEX NAME)

10/677,551

Page 20

L4 ANSWER 6 OF 11 CAPLUS COPYRIGHT 2004 ACS ON STN ACCESSION NUMBER: 1989:38857 CAPLUS 10:38857

Stereochemical aspects of the "tert-amino effect". TITLE:

Enantio- and diastereoselectivity in the synthesis of quinolines, pyrrolo[1,2-a]quinolines, and [1,4]oxazino[4,3-a]quinolines [1,4]oxazino[4,3-a]quinolines [1,4]oxazino[4,3-a]quinolines [1,4]oxazino[4,3-a]quinolines [1,4]oxazino[4,3-a]quinolines [1,4]oxazino[4,3-a]quinolines [1,4]quinolines [1,4]quino

AUTHOR(S):

CORPORATE SOURCE:

Netn. Journal of Organic Chemistry (1989), 54(1), 209-16 CODEN: JOCEAH; ISSN: 0022-3263 SOURCE:

DOCUMENT TYPE: LANGUAGE: OTHER SOURCE(5): GI

Journal English CASREACT 110:38857

AB Thermal isomerization of the optically pure 2-vinyl-N,N-dialkylanilines, with a Me or an E substituent at the α -position of the N,N-dialkyl molety, affords enantioselectively the optically pure pyrrolo[1,2-a] quinolines and the [1,4]oxazino[4,3-a] quinoline, with the Me or Et substituent at the bridgehead C atom, and the quinoline, resp. The optical purity of these quinoline derivs. was determined by JM-MMR spectroscopy in the presence of chiral shift reagents. Heating of the optically pure analogs in which the substituent is a methoxymethyl group in refluxing 1-butanol yields, besides the compds. With the methoxymethyl group at the bridgehead carbon atom, also the regioisomers that are enantiomerically pure. Mixts. of the diastereomers e.g. I (R, Rl = H, Me) were obtained by

cyclization of compound e.g. 11, with a 3-ethylmorpholinyl group, in refluxing 1-butanol. The compds, were proven enantiomerically pure. The configuration of the compds, were determined by x-ray anal. of I $\{R=H, T\}$

Me) and 1H-NMR, and 1H-NOE difference spectroscopy. These results provide conclusive evidence for the mechanism of these cyclization reactions, which are further examples of the "tert-amino effect". The effect of substituents on the enantio- and disastereosclectivity of the cyclization is discussed.

is discussed. IT 117607-21-3P 117607-28-0P

ANSWER 6 OF 11 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

117607-22-4 CAPLUS [1,4] Oxazino[4,3-a] quinoline-5,5(6H)-dicarbonitrile, 4a-ethyl-1,2,4,4a-etrahydro-6-methyl-, cis- (9CI) (CA INDEX NAME)

Relative stereochemistry.

117677-89-1 CAPLUS [1,4]Oxazino(4,3-a]quinoline-5,5(6H)-dicarbonitrile, 4a-ethyl-1,2,4,4a-tetrahydro-6-methyl-, (4as-trans)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

117677-90-4 CAPLUS
[1,4]Oxazino[4,3-a]quinoline-5,5(6H)-dicarbonitrile, 4a-ethyl-1,2,4,4a-tetrahydro-6-methyl-, (4aS-cis)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Answer 6 of 11 caplus copyright 2004 ACS on STN (Continued)
RL: PRP (Properties); SPN (Synthetic preparation); FREP (Preparation)
(prepn. and crystal structure of)
117607-21-3 CAPLUS
[1,4]OXAZİNO[4,3-a]quinoline-5,5[6H]-dicarbonitrile, 4a-ethyl-1,2,4,4a-tetrahydro-6-methyl-, trans- (SCI) (CA INDEX NAME)

Relative stereochemistry.

RN 117607-28-0 CAPLUS CN [1,4]Oxazino[4,3-a]quinoline-5,5(6H)-dicarbonitrile, 1,2,4,4a-tetrahydro-6-methyl-, trans- (9CI) (CA INDEX NAME)

Relative stereochemistry.

117607-20-2P 117607-22-4P 117677-89-1P 117677-90-4P

RL: SPN (Synthetic preparation); PREP (Preparation)

Absolute stereochemistry.

(preparation of)
117607-20-2 CAPLUS
[1,4]Oxazino[4,3-a]quinoline-5,5(6H)-dicarbonitrile, 4a-ethyl-1,2,4,4a-tetrahydro-, (S)- (9CI) (CA INDEX NAME)

ANSWER 6 OF 11 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

L4 ANSWER 7 OF 11 CAPLUS COPYRIGHT 2004 ACS ON STN ACCESSION NUMBER: 1984:611257 CAPLUS DOCUMENT NUMBER: 101:211257

A novel method for heteroatom-substituted free TITLE: radical

18

generation by photochemical electron transfer induced desilylation of RXCR2SiMe3 systems Brumfield, Martha A.; Quillen, Suzanne L.; Yoon, Ung Chan; Mariano, Patrick S. Dep. Chem., Univ. Maryland, College Fark, MD, 20742, USA

AUTHOR (S):

CORPORATE SOURCE: USA Journal of the American Chemical Society (1984), 106(22), 6855-6 CODEN: JACSAT; ISSN: 0002-7863 Journal English SOURCE:

DOCUMENT TYPE: LANGUAGE: GI

$$\bigvee_{\substack{H\\ \text{CH}_2 X R}} ^{\text{Ph}} \qquad \qquad \bigvee_{\substack{N\\ \text{O}}} \quad \qquad 0 \quad 1$$

AB Irradiation of 2-phenyl-1-pyrrolinium perchlorate in MeCN containing RXCH2SiMe3

(RX = EtO, Me2CHO, EtS) leads to generation of the corresponding adducts

(same RX), arising by pathways involving excitation, singlet state electron transfer, cation radical desilylation, and ultimate radical pair coupling. Similarly, intramol. processes proceeding through these routes lead to production of heterocyclic products. Thus, (trimethylsilylmethoxyalkyl)quinolinium salts produce cyclic ethers,

/II, when irradiated in MeCN, followed by hydrogenation.
40971-38-8P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
40971-38-8 CAPLUS
[1,4]Oxazino[4,3-a]quinoline, 1,2,4,4a,5,6-hexahydro- (9CI) (CA INDEX NAME)

ACCESSION NUMBER: DOCUMENT NUMBER:

TITLE:

ANSWER 8 OF 11 CAPLUS COPYRIGHT 2004 ACS on STN

ISSION NUMBER: 1984:51477 CAPLUS

MENT NUMBER: 100:51477

E: "Tert-Amino effect" in heterocyclic synthesis.

Formation of N heterocycles by ring-closure reactions of substituted 2-vinyl-N,N-dialkylanilines

OR(S): Verboom, Willem; Reinhoudt, David N.; Visser, lard;

AUTHOR (S):

Richard;

Harkema, Sybolt
Twente Univ. Technol., Enschede, 7500 AE, Neth.
Journal of Organic Chemistry (1984), 49(2), 269-76
CODEN: JOCEAH; ISSN: 0022-3263
Journal
English CORPORATE SOURCE: SOURCE:

DOCUMENT TYPE:

LANGUAGE: OTHER SOURCE(S): GI

English CASREACT 100:51477

AB 2-Vinyl-N,N-dialkylanilines react thermally in polar solvents and/or in the presence of Lewis acids via [1,5] or [1,6] hydrogen transfer followed by C-C bond formation to give heterotricyclic compds. The reaction depends on the type of N,N-dialkylamino group and on the type and position of substituents of the vinyl moiety. Di-Me 1-pyrrolidinyl butenedioate and (1-pyrrolidinyl)benzeneacetonitrile undergo a thermal rearrangement to

the pyriolo[1,2-a]indoles I (R = R1 = CO2Me; R = cyano, R1 = Ph), resp., while the 1-piperidinyl and 4-morpholinyl butenedioates and (4-morpholinyl) between the proper of the pyriology of the p

87699-07-8P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
87699-07-8 CAPLUS
[1,4]Oxazino[4,3-a]quinoline-5,5(6H)-dicarbonitrile, 1,2,4,4a-tetrahydro-(9CI) (CA INDEX NAME)

L4 ANSWER 7 OF 11 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

ANSWER 8 OF 11 CAPLUS COPYRIGHT 2004 ACS on STN

(Continued)

L4 ANSWER 9 OF 11
ACCESSION NUMBER:
DOCUMENT NUMBER:
1980:146175 CAPLUS
92:146175 CAPLUS
92

German CASREACT 92:146175 OTHER SOURCE(S):

Heterocyclic derivs. (e.g., I; Y = PhCMe, CO, CS, CH2, NEt, O, S) or naphth $\{3,2,1-dc\}$ anthracenes, which can be represented by skeleton types

(X = methylene group, CO; Y = S, methylene or imino group, CS, CO, O, bond: Z = N, C+, C-) or III (X = methylene group, Y = C, Z = N+, C; R undefined), are helically distorted in the stereochem. ground state. ΙI

racemize so fast, however, that their free enthalpy of racemization (AG \leq 21 kcal/mol) can be determined by standard dynamic NMR methods Only type I compds. with relatively large bridges (Y = PhCMe or S) sit

higher racemization barriers. The latter had to be determined by

sical equilibrium methods. The results indicate that for II and III regement of bridges Y and/or X and diminution of Z should increase nonbonding interactions in the planar transition state and therefore increase the racemization barrier. For substituted I (Y = CMeZ) derivs., IH NNR signals of disastereotropic and constitutopic groups were found to coincide. 73183-70-7P

/3183-70-78
RI: SPN (Synthetic preparation); PREF (Preparation)
(preparation of)
73183-70-7 CAPLUS
9H-Quino(3,2,1-kl)phenoxazine, 9,9-dimethyl- (9CI) (CA INDEX NAME)

L4 ANSWER 10 OF 11 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1973:124521 CAPLUS
TTILE: Synthesis of 1,2,4,4a,5,6-hexahydro-1,4-oxazino[3,4-a]quinolines
AUTHOR(S): Rao V. Aruna; Jain, Padam C.; Anand, Nitya
CORPORATE SOURCE: Contain Journal of Chemistry (1972), 10(12), 1134-5
CODEN: IJOCAP; ISSN: 0019-5103
DOCUMENT TYPE: Journal
LANGUAGE: CODEN: IJOCAP; ISSN: 0019-5103
DOCUMENT TYPE: Journal
LANGUAGE: Language: Lan

[1,4]Oxazino[4,3-a]quinoline, 1,2,4,4a,5,6-hexahydro- (9CI) (CA INDEX

40971-39-9 CAPLUS [1,4]Oxazino[4,3-a]quinolin-1(2H)-one, 4,4a,5,6-tetrahydro- (9CI) (CA INDEX NAME)

TIGHT TABLES [1,4]OMAZIND[4,3-a]quinoline, 1,2,4,4a,5,6-hexahydro-2-phenyl-, trans-(961) (CA INDEX NAME)

Relative stereochemistry.

ANSWER 9 OF 11 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

ANSWER 10 OF 11 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

40971-43-5 CAPLUS
[1,4]Omazino[4,3-a]quinoline, 1,2,4,4a,5,6-hexahydro-2-methyl- (9CI) (CA
INDEX NAME)

40971-44-6 CAPLUS [1,4]Oxazino[4,3-a]quinoline, 1,2,4,4a,5,6-hexahydro-2-phenyl-, cis-(9CI) (CA INDEX NAME)

DATE

19650624

L4 ANSWER 11 OF 11 CAPLUS COPYRIGHT 2004 ACS ON STN
ACCESSION NUMBER: 1968:69015 CAPLUS
DOCUMENT NUMBER: 68:69015
INVENTOR(S): 2irkle, Charles L.
PATENT ASSIGNEE(S): Smith Kline and French Laboratories
U.S., 5 pp.
CODEN: USKKAM
PATENT INFORMATION: 1
PATENT INFORMATION: PATENT NO. KIND DATE APPLICATION NO. US 3337545 19670822 US 196506
For diagram(s), see printed CA Issue.
A mixture containing 6.6 g. Me2N(CH2)3Cl, 1.3 g. Mg, and 150-200 ml. US give I [R = Me2N(CH2)3 (A), X = OH, Y = H]; I.HCl (II), m. 127°. A mixture containing 6 g. I, 60 g. HCO2Na, and 180 ml. 98% HCO2N is refluxed 24 hrs. to give I [R = A, X = H, Y = H] (III), b0.25 215-18°. II is similarly treated with HCO4N and HCO2Na to give III. I is twice distilled at

0.01-0.1
mma. to give I [(RX =) Me2NCH2CH2CH, Y = H] (IV). Hydrogenation of IV over

over

Pd-on-charcoal in EtoH gives III. Similarly prepared is V (R = A, X = OH, Y

= H) m. 182* (decomposition). A stirred mixture containing 13.2 g.
o-IC6H4C02Me 9.2 g. phenoxazine, 6 ml. nitrobenzene, 7.5 g. K2C03, 85 ml. xylene, and 0.2 g. Cu bronze is refluxed 14 hrs. to give
10-(o-carbomethoxyphenyl)phenoxazine (VI). A suspension containing 6.3 g. VI

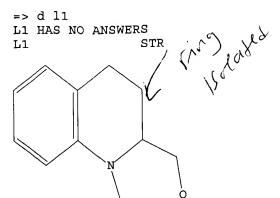
10-(o-carbomethoxyphenyl)phenoxazine (VII). A suspension containing 6.3 g. VI
and 125 ml. 15% aqueous KOH is refluxed 5 hrs. and acidified to give
10-(o-carboxyphenyl)phenoxazine (VII). To a suspension of 1.5 g. VII in
60 ml. xylene is added 1.4 g. PCIS and the mixture stirred at room
temperature for
10 min. The solution is cooled, and a solution containing 6.25 g. Snc14
and 20 ml.
xylene is added dropwise in 10 min. The mixture is stirred 45 min. and
hydrolyzed by dropwise addition of 25 ml. cold concentrated HCl to give
9H-quino[3,2,1-kl]phenoxazin-9-one (VIII). VIII is treated as described
above to give IX (R, X given): 3-(4-methylpiperazino)propyl (B), OH; and
B, H. The compds. are useful as antidepressants.

IT 17591-85-40 (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 17591-85-4 CAPLUS
CN 9H-Quino[3,2,1-kl]phenoxazin-9-one (8CI) (CA INDEX NAME)

L4 ANSWER 11 OF 11 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

10/677,551

Page 3





Structure attributes must be viewed using STN Express query preparation.

=> s l1 SAMPLE SEARCH INITIATED 11:46:55 FILE 'REGISTRY' SAMPLE SCREEN SEARCH COMPLETED - 409 TO ITERATE

100.0% PROCESSED 409 ITERATIONS

2 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**

BATCH **COMPLETE**

PROJECTED ITERATIONS:

6967 TO 9393

PROJECTED ANSWERS:

2 TO 124

L2

2 SEA SSS SAM L1

=> s l1 sss full FULL SEARCH INITIATED 11:47:04 FILE 'REGISTRY' FULL SCREEN SEARCH COMPLETED - 7865 TO ITERATE

100.0% PROCESSED 7865 ITERATIONS

20 ANSWERS

SEARCH TIME: 00.00.01

L3 20 SEA SSS FUL L1

=> file caplus
COST IN U.S. DOLLARS

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ENTRY SESSION 155.42 155.63

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10/677,551 Page 4

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This file contains CAS Registry Numbers for easy and accurate substance identification.

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L4 6 L3

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L4 ANSMER 1 OF 6 CAPLUS COPYRIGHT 2004 ACS ON STN
ACCESSION NUMBER: 2004:308443 CAPLUS
DOCUMENT NUMBER: 140:339202
TITLE: 1NVENTOR(S): Barbacterial agents
Barbacterial agents
Barbacterial Robert; Dobrowolski, Paul Joseph;
Hurd, Alexander Ross; McNamara, Dennis Joseph; Palmer,

John Raymond: Romero, Arthur Glenn; Ruble, James Craig; Sherry, Debra Ann; Thomasco, Lisa Marie; Toogood, Peter Laurence Pharmacia & Upjohn Company, USA PCT Int. Appl., 128 pp. CODEN: PIXXD2 Patent English 1

PATENT ASSIGNEE(S): SOURCE:

DOCUMENT TYPE:

LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO.					KIN	KIND DATE			APPLICATION NO.						DATE			
wo	2004				A1		2004	0415		WO 2	003-	IB43	89		2	0031	003	
	W:	AF.	AG.	AL.	AM.	AT,	AU,	AZ,	BA,	BB,	BG,	BR,	BY,	BZ,	CA,	CH,	CN,	
		co.	CR.	cu.	CZ.	DE.	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,	GE,	
		GH.	GM.	HR.	HU.	ID.	IL,	IN.	IS,	JP,	KE,	KG,	KP,	KR,	ΚZ,	LC,	LK,	
		LR.	LS.	LT.	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	ΜX,	ΜZ,	NI,	NO,	NZ,	
		OM.	PG.	PH.	PL.	PT,	RO,	RU,	sc,	SD,	SE,	SG,	sĸ,	SL,	SΥ,	ТJ,	TM,	
		TN.	TR.	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	Yυ,	za,	ZM,	ZW,	AM,	ΑZ,	
		BY.	KG.	KZ,	MD													
	RW:	GH,	GM.	KE.	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	ΑT,	BE,	ВG,	
		CH.	CY.	CZ.	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HU,	IE,	IT,	LU,	MC,	
		NL.	PT,	RO,	SE,	SI,	sĸ,	TR,	BF,	ВJ,	CF,	ÇG,	CI,	CM,	GΑ,	GN,	GQ,	
		GW,	ML,	MR,	NE,	5N,	TD,	TG										
US	2004	1622	79		A1		2004	0819		US 2	003-	6 <u>775</u>	51		2	0031	002	

US 2004162279 PRIORITY APPLN. INFO.: US 2003-677551 US 2002-416685P 20031002 P 20021007 US 2002-427189P P 20021118

us 2003-457622P P 20030326

OTHER SOURCE(S):

MARPAT 140:339202

ANSWER 1 OF 6 CAPLUS COPYRIGHT 2004 ACS on STN (Continued) [1,4]Oxazino[4,3-a]quinoline-5,5,8[6H]-tricarbonitrile, 1,2,4,4a-tetrahydro-2,4-dimethyl-, (2R,4S,4aR)-rel- (9CI) (CA INDEX

Relative stereochemistry.

679839-65-7 CAPLUS [[,4]0xazino[4,3-s]quinoline-5,5(6H)-dicarbonitrile, 8-bromo-1,2,4,4a-tetrahydro-2,4-dimethyl-, (2R,4s,4aR)-rel- (9CI) (CA INDEX NAME)

679840-51-8 CAPLUS
[1,4]Oxazino[4,3-a]quinoline-5,5,8(6H)-tricarbonitrile,
1,2,4,4a-tetrahydro-2,4-dimethyl- (9CI) (CA INDEX NAME)

679840-52-9 CAPLUS
[1,4]0xazino[4,3-a]quinoline-5,5[6H]-dicarbonitrile, 8-bromo-1,2,4,4a-tetrahydro-2,4-dimethyl- (9CI) (CA INDEX NAME)

ANSWER 1 OF 6 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

The invention includes tricyclic tetrahydroquinolines (shown as I; variables defined below; many of the examples are spiro compds., e.g.

and trans—II), and pharmaceutical compns. thereof, that exhibit useful antibacterial activity against a wide range of human and veterinary pathogens. For I: R1 is R12, C(O)R6, or CN; R2 = R12, C(O)R7, CN, CK2R7, NR17R7, CH2CCOR7, CH2CH2COR7, R3 = H, R2, O, C1-7 alkyl, C3-8 cycloalkyl, aryl, heteroaryl, or halo; each R4 = H, halo, OR12, OC(O)NR9R10, SR12, S(O)mR13, NR9R10, NR9S(O)MR13, R16, OR12, OC(O)NR9R10, CO2R12, C(O)R13, C(:NOR12)R13, S(O)mWR9R10, NR9C(O)R12, C1-7 alkyl, C3-8 cycloalkyl, N3, hetl, or C(O)O-C1-4alkyl-R12; each R5 = H, C1-7alkyl, C3-8cycloalkyl, aryl or heteroaryl; X = [c(R15)2]m-O(C(R15)2]k-, -[c(R15)2]m-O(C(R15)2]k-, or (c(R15)2]m-O(C(R15)2]k-, or (c(R15)2]k-, Or (c(R15)2)k-, Or (c(R15)2]k-, Or (c(R15)2)k-, Or (c(R15)2]k-, Or (c(R15)2)k-, Or (c(R15)2)

11

unsatd.,
and having 1-4 heteroatoms O, S, and N; hetl being (un)substituted by 1-2
substituents = cl-C4alkyl, amino, cl-C4alkylamino, cl-C4alkyloxy,

halogen, CN, O, or S; addnl. details including provisos are given in the claims.

method of preparation is claimed and .apprx.60 example prepns. are

used.

For example, cis- and trans-II were prepared in 3 steps starting with condensation of 2-fluoro-5-nitrobenzaldehyde with 2,6-dimethylmorpholine

condensation of 2-fluoro-5-nitrobenzaldehyde with 2,6-dimethylmorpholine to give cis- and trans-2-(2,6-dimethylmorpholin-4-yl)-5-nitrobenzaldehyde, each of which was condensed with barbituric acid to give cis- and trans-5-[2-(2,6-dimethylmorpholin-4-yl)-5-nitrobenzylidenelpyrimidine-2,4,6(1H,3H,5H)-trione, resp., each of which was cyclized in refluxing MeONI. Inhibition of E. coli DNA gyrase by 12 examples of I are reported.

IT 679839-64-67 679839-65-77 679840-31-6P 679840-51-0P 679840-52-9P 679840-52-679840-83-6P RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(uses) (drug candidate; preparation of tricyclic tetrahydroquinoline antibacterial $% \left(\frac{1}{2}\right) =\frac{1}{2}\left(\frac{1}{2}\right) +\frac{1}{2}\left(\frac{1$

agents) 679839-64-6 CAPLUS

ANSWER 1 OF 6 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

679840-82-5 CAPLUS [1,4] Oxazino[4,3-a] quinoline-5,5,8(6H)-tricarbonitrile, 1,2,4,4a-tetrahydro-2,4-dimethyl-, (2R,45,4aS)- (9CI) (CA INDEX NAME)

679840-83-6 CAPLUS
[1,4]Oxazino(4,3-a)quinoline-5,5(6H)-dicarbonitrile, 8-bromo-1,2,4,4a-tetrahydro-2,4-dimethyl-, (2R,4S,4aS)- (SCI) (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT:

THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

L4 ANSWER 2 OF 6 CAPLUS COPYRIGHT 2004 ACS ON STN
ACCESSION NUMBER: 1995:711926 CAPLUS
DOCUMENT NUMBER: 123:285925
Synthesis of tricyclic cyano-substituted
tetrahydroquinolines by radical decyanation of

dinitriles
Gerlach, Uwe
Hoechst AG, Frankfurt, 65296, Germany
Tetrahedron Letters (1995), 36(29), 5159-62
CODEN: TELEAY; ISSN: 0040-4039
Elsevier
Journal
English
CASREACT 123:285825 AUTHOR(S): CORPORATE SOURCE: SOURCE:

PUBLISHER: DOCUMENT TYPE: LANGUAGE: OTHER SOURCE(S): GI

Various dicyanides I (X = bond, CH2, NMe, O, S, SO, SO2) of tricyclic tetrahydroquinoline derivs. were converted to their monocyanides in high yield by reductive radical decyanation with tributyltin hydride and 2,2'-azobisisobutyronitrile (AIRN).
87699-07-8
RI: RCT (Reactant); RACT (Reactant or reagent)
(synthesis of tricyclic cyano-substituted tetrahydroquinolines by radical decyanation of geminal dinitriles)
87699-07-8
CAPIUS
(1,4]Cazzino(4,3-a]quinoline-5,5(6H)-dicarbonitrile, 1,2,4,4a-tetrahydro-(9CI) (CA INDEX NAME) AΒ

IT

IT

159778-23-8P 169778-24-9P
RL: SPN (Synthetic preparation); PREP (Preparation)
(synthesis of tricyclic cyano-substituted tetrahydroquinolines by radical decyanation of geminal dinitriles)
169778-23-8 CAPLUS

L4 ANSWER 3 OF 6 CAPLUS COPYRIGHT 2004 ACS on STN ACCESSION NUMBER: 1989:38857 CAPLUS 10:38857 Stereochemical aspects of the "tert-amino effect". TITLE:

AUTHOR(S):

Enantio- and diastereoselectivity in the synthesis of quinolines, pyrrolo[1,2-a]quinolines, and [1,4]exazino[4,3-a]quinolines Nijhuis, Walter H. N.; Verboom, Willem; Abu El-Fadl, A.; Van Hummel, Gerrit J.; Reinhoudt, David N. Lab. Org. Chem., Univ. Twente, Enschede, 7500 AE, Neth.
Journal of Organic Chemistry (1989), 54(1), 209-16 CODEN: JOCEAH; ISSN: 0022-3263
Journal English
CASREACT 110:38857 CORPORATE SOURCE:

SOURCE:

DOCUMENT TYPE: LANGUAGE: OTHER SOURCE(S): GI

AB Thermal isomerization of the optically pure 2-vinyl-N,N-dialkylanilines, with a Me or an E substituent at the α -position of the N,N-dialkyl moiety, affords enantioselectively the optically pure pyrrolol1,2-alquinolines and the [1,4] loxazino[4,3-alquinoline, with the Me or Et substituent at the bridgehead C atom, and the quinoline, resp. The optical purity of these quinoline derivs. was determined by IM-NNR spectroscopy in the presence of chiral shift reagents. Heating of the optically pure analogs in which the substituent is a methoxymethyl group in refluxing 1-butanol yields, besides the compds. With the methoxymethyl group at the bridgehead cathon atom, also the regionsomers that are enantiomerically pure. Mixts. of the diastereomers e.g. I (R, Rl = H, Me) were obtained by

cyclization of compound e.g. II, with a 3-ethylmorpholinyl group, in refluxing 1-butanol. The compds. were proven enantiomerically pure. The configuration of the compds. were determined by x-ray anal. of I (R = H,

Me) and 1H-NMR, and 1H-NOE difference spectroscopy. These results provide

ide
conclusive evidence for the mechanism of these cyclization reactions,
which are further examples of the "tert-amino effect". The effect of
substituents on the enantio- and diastereoselectivity of the cyclization
is discussed.
117607-21-39 117607-20-0F
RE: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(preparation and crystal atructure of)
117607-21-3 CAPLUS
[1,4]Oxazino[4,3-a]quinoline-5,5(6H)-dicarbonitrile, 4a-ethyl-1,2,4,4a-

Habte

ANSWER 2 OF 6 CAPLUS COPYRIGHT 2004 ACS on STN (Continued) [1,4]Oxazino[4,3-a]quinoline-5-carbonitrile, 1,2,4,4a,5,6-hexahydro-,trans- (9CI) (CA INDEX NAME)

Relative stereochemistry.

169778-24-9 CAPLUS [1,4]Oxazino[4,3-a]quinoline-5-carbonitrile, 1,2,4,4a,5,6-hexahydro-,

(9CI) (CA INDEX NAME)

Relative stereochemistry.

ANSWER 3 OF 6 CAPLUS COPYRIGHT 2004 ACS on STN tetrahydro-6-methyl-, trans- (9CI) (CA INDEX NAME) (Continued)

Relative stereochemistry.

RN 117607-28-0 CAPLUS CN (1,4)Oxazino(4,3-a)quinoline-5,5(6H)-dicarbonitrile, 1,2,4,4a-tetrahydro-6 methyl-, trans- (9CI) (CA INDEX NAME)

Relative stereochemistry

IT

117607-20-2P 117607-22-4P 117677-89-1P 117677-90-4P RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of)
117607-20-2 CAPLUS
[1,4]Oxazino(4,3-a]quinoline-5,5(6H)-dicarbonitrile, 4a-ethyl-1,2,4,4a-tetrahydro-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry

11,4]Oxazino[4,3-a]quinoline-5,5[6H]-dicarbonitrile, 4a-ethyl-1,2,4,4a-tetrahydro-6-methyl-, cis- (9CI) (CA INDEX NAME)

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Page 7

(Continued) L4 ANSWER 3 OF 6 CAPLUS COPYRIGHT 2004 ACS on STN Relative stereochemistry.

117677-89-1 CAPLUS 11,4]Oxazino[4,3-a]quinoline-5,5[6H]-dicarbonitrile, 4a-ethyl-1,2,4,4a-tetrahydro-6-methyl-, (4aS-trans)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

117677-90-4 CAPLUS [1,4]Oxazino[4,3-a]quinoline-5,5(6H)-dicarbonitrile, 4a-ethyl-1,2,4,4a-tetrahydro-6-methyl-, (4aS-cis)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L4 ANSWER 4 OF 6 CAPLUS COPYRIGHT 2004 ACS on STN

L4 ANSWER 4 OF 6 CAPLUS COPYRIGHT 2004 ACS ON STN ACCESSION NUMBER: 1984:611257 CAPLUS DOCUMENT NUMBER: 101:211257 A Novel method for betarration. A novel method for heteroatom-substituted free generation by photochemical electron transfer induced desilylation of RXCHZSiMe3 systems
Brumfield, Martha A.; Quillen, Suranne L.; Yoon, Ung
Chan; Mariano, Patrick S.
Dep. Chem., Univ. Maryland, College Park, MD, 20742, AUTHOR (S): CORPORATE SOURCE: USA Journal of the American Chemical Society (1984), 106(22), 6855-6 CODEN: JACSAT; ISSN: 0002-7863 Journal SOURCE: DOCUMENT TYPE: LANGUAGE: GI

AB Irradiation of 2-phenyl-1-pyrrolinium perchlorate in MeCN containing RXCH2SiMe3 (RX = Eto, Me2CHO, EtS) leads to generation of the corresponding adducts

(same RX), arising by pathways involving excitation, singlet state electron transfer, cation radical desilylation, and ultimate radical pair coupling. Similarly, intramol. processes proceeding through these routes lead to production of heterocyclic products. Thus, (trimethylsilylmethoxyalkyl)quinolinium salts produce cyclic ethers,

e.g., IT

II, when irradiated in MeCN, followed by hydrogenation.
40971-38-8P
RI: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
40971-38-8 - CAPLUS
[1,4]0xazino[4,3-a]quinoline, 1,2,4,4a,5,6-hexahydro- (9CI) (CA INDEX

L4 ANSWER 5 OF 6 CAPLUS COPYRIGHT 2004 ACS on STN ACCESSION NUMBER: 1984:51477 CAPLUS

100:51477

DOCUMENT NUMBER:

100:51477
"Tert-Amino effect" in heterocyclic synthesis.
Formation of N heterocycles by ring-closure reactions of substituted 2-vinyl-N,N-dialkylanilines
Verboom, Willem; Reinhoudt, David N.: Visser,

AUTHOR(S): Richard;

CORPORATE SOURCE:

Harkema, Sybolt Twente Univ. Technol., Enschede, 7500 AE, Neth. Journal of Organic Chemistry (1984), 49(2), 269-76 CODEN: JOCEAN; ISSN: 0022-3263 Journal

DOCUMENT TYPE:

English CASREACT 100:51477 OTHER SOURCE(S):

2-vinyl-N,N-dialkylanilines react thermally in polar solvents and/or in the presence of Lewis acids via [1,5] or [1,6] hydrogen transfer followed by C-C bond formation to give heterotricyclic compds. The reaction depends on the type of N,N-dialkylamino group and on the type and

position
of substituents of the vinyl moiety. Di-Me 1-pyrrolidinyl butenedioate
and (1-pyrrolidinyl)benzeneacetonitrile undergo a thermal rearrangement

and (1-pyrrolidinyl)benzeneacetonitrile undergo a thermal rearrangement the pyrrolo[1, 2-a]indoles I (R = R1 = COZMe: R = cyano, R1 = Ph), resp., while the 1-piperidinyl and 4-morpholinyl butenedioates and (4-morpholinyl)benzeneacetonitrile do not react. (1-Piperidinyl)benzeneacetonitrile yields in refluxing PhMe in the presence of Znc12 the pyridol(1,2-a]indole II and its HCN elimination product. Under these conditions cis- and trans-I (R = cyano, R1 = Ph) also cellminate HCN. Heating the III (R2 = COZMe, cyano, X = bond; R2 = cyano, X = CH2, O) in BuOH gives pyrrolo(1,2-a]quinolines, benzo[c]quinolizine, and [1,4]oxazino(4,3-a]quinoline derivs., resp. The mechanisms of both types of cyclization, which are examples of the tert-amino effect, are discussed.

87659-07-88 CAPLUS
[1,4]Oxazino(4,3-a]quinoline-5,5(6H)-dicarbonitrile, 1,2,4,4a-tetrahydro-(9CI) (CA INDEX NAME)

L4 ANSWER 5 OF 6 CAPLUS COPYRIGHT 2004 ACS on STN

L4 ANSWER 6 OF 6 CAPLUS COPYRIGHT 2004 ACS on STN Relative stereochemistry. (Continued)

40971-43-5 CAPLUS [1,4]0xazino[4,3-a]quinoline, 1,2,4,4a,5,6-hexahydro-2-methyl- (9CI) (CA INDEX NAME)

RN 40971-44-6 CAPLUS CN [1,4]Oxazino[4,3-a]quinoline, 1,2,4,4a,5,6-hexahydro-2-phenyl-, cis-(9CI) (CA INDEX NAME)

Relative stereochemistry.

L4 ANSWER 6 OF 6 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1973:124521 CAPLUS
DOCUMENT NUMBER: 78:124521
TITLE: Synthesis of 1,2,4,4a,5,6-hexahydro-1,4-oxazino[3,4-a]quinolines
AUTHOR(S): Rao, V. Aruna; Jain, Padam C.; Anand, Nitya
CORPORATE SOURCE: Cent. Drug Res. Inst., Lucknow, India
SOURCE: CODEN: IJOCAP; ISSN: 0019-5103

DOCUMENT TYFE: Journal
LANGUAGE: English
GT Por diagram(s), see printed CA Issue.
AB 1,2,4,4a,5,6-Hexahydro-1,4-oxazino[3,4-a]quinoline (I R = H) and its
2-methyl- and 2-phenyl derivs. have been synthesized starting from Me
1,2,3,4-tetrahydroquinaldate (II). If on LIALH4 reduction, followed by
treatment with ethylene oxide, gives 1-β-hydroxymethyl-2-hydroxymethyl1,2,3,4-tetrahydroquinoline (II, R = H). The latter on treatment with
48% HBr gives I (R = H). Condensation of 2-hydroxymethyl-1,2,3,4tetrahydroquinoline with styrene and propylene oxides gives the
corresponding II (R = Ph, Me), which react with 48% HBr to give the
corresponding II (R = Ph, Me), which react with 48% HBr to give the
corresponding I as mixts. of diastereoisomers. The stereochem. of the
substituents at 2-position has been proposed on the basis of NMR data.

17 40971-38-8 40971-43-9P 40971-42-4P
AUST1-43-5F 40971-43-5F 40971-43-5P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 40971-38-8 CAPLUS
CN (1,4)Oxazino(4,3-a]quinoline, 1,2,4,4a,5,6-hexahydro- (9CI) (CA INDEX
NAME)

40971-39-9 CAPLUS
[1,4]Oxazino[4,3-a]quinolin-1(2H)-one, 4,4a,5,6-tetrahydro- (9CI) (CA INDEX NAME)

40971-42-4 CAPLUS [1,4]Oxazino[4,3-a]quinoline, 1,2,4,4a,5,6-hexahydro-2-phenyl-, trans-(SCI) (CA INDEX NAME)